# Artificial Intelligence in advancing Biology and Genetics

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## Effectives: 20

Language: English

#### **Prerequisites:**

none

### Where?

Université Paris Cité Moulin Campus

### When?

#### **Evaluation:** Oral exam on friday

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# Number ECTS: 3 Total numbers of hours: 30h Teaching format: lectures, practical, conferences

## **Teaching objectives**

- Understand the basic principles of AI

- Explore the contribution of AI tools in fundamental research in biology, genetics and genomics.

- Examine the applications of AI in industry and clinical settings.

## **Teaching outline**

- Definition of AI and its relevance to biological sciences.

- Overview of machine learning, deep learning, and neural networks in biological contexts.

AI and Protein Folding Simulation Role of AI in enhancing image quality and identifying biological patterns.

AI in Genetics and Genomics AI in clinics

AI III CIIIIICS

Ethical considerations and challenges